

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1. (Currently Amended) A system for providing wireless data communications between mobile units and a wired network operating according to a wireless data communications standard protocol having high level MAC functions and low level MAC functions, comprising:

a plurality of RF ports configured to perform the low level MAC functions of the wireless data communications standard protocol, the RF ports having at least one data interface and a security status, said RF ports being arranged to receive formatted data signals at said data interface and transmit corresponding RF data signals and arranged to receive RF data signals and provide corresponding formatted data signals; and

at least one cell controller separately housed from said plurality of RF ports and configured to perform the high level MAC functions of the wireless data communications standard protocol, the at least one controller arranged to receive data signals from said wired network and to provide formatted data signals corresponding thereto to said data interface of said RF ports and to receive formatted data signals from said RF ports and to provide data signals corresponding thereto to said wired network, said cell controller controlling association of mobile units with one of said RF ports based on the security status of the one of said RF ports, providing formatted data signals for said mobile units to an associated RF port, and receiving formatted data signals from said mobile unit from said associated RF port.

Claims 2-55. (Cancelled)

56. (New) The system specified in claim 1 wherein the wireless data communications standard protocol is the IEEE 802.11 standard protocol.

57. (New) The system specified in claim 1, wherein said low level media access control functions performed by said RF ports include a cyclic redundancy check function.

58. (New) The system specified in claim 1, wherein said low level media access control functions performed by said RF ports include a network activity vector function.

59. (New) The system specified in claim 1, wherein said low level media access control functions performed by said RF ports include a ready to send/clear to send function.

60. (New) The system specified in claim 1, wherein said low level media access control functions performed by said RF ports include a header generation/parsing function.

61. (New) The system specified in claim 1, wherein said low level media access control functions performed by said RF ports include a collision avoidance function.

62. (New) The system specified in claim 1, wherein said low level media access control functions performed by said RF ports include a frequency hopping function.

63. (New) The system specified in claim 1, wherein said low level media access control functions performed by said RF ports include an ack parsing/generating function.

64. (New) The system specified in claim 1, wherein said lower level media access control functions performed by said RF ports include a retransmission timeout function.

65. (New) The system specified in claim 1, wherein said higher level media access control functions performed by said cell controller include a roaming function.

66. (New) The system specified in claim 1, wherein said higher level media access control functions performed by said cell controller include a retransmission function.

67. (New) The system specified in claim 1, wherein said higher level media access control functions performed by said cell controller include a rate control function.

68. (New) The system specified in claim 1, wherein said higher level media access control functions performed by said cell controller include a host interface function.

69. (New) The system specified in claim 1, wherein said lower level media access control functions performed by said RF ports includes a cyclic redundancy check function, a network activity vector function, a ready to send/clear to send function, a header generation/parsing function, a collision avoidance function, a frequency hopping function, an ack parsing/generating function, and a retransmission timeout function.

70. (New) The system specified in claim 1, wherein said higher level media access control functions performed by said cell controller include a roaming function, a retransmission function, a rate control function, a host interface function.